

Urgent action needed to close the ‘livestock data gap’ to address poverty and food insecurity



Group photo at Flamingo Dai Lai, Vinh Phuc Province, Vietnam (photo credit: V. Meadu - SEBI).

Better data is urgently needed for improving livestock health and productivity in Vietnam and the rest of the world, according to experts who gathered in November 2018 in Vinh Phuc Province, Vietnam. The meeting of the Livestock Data for Decisions (LD4D) Community of Practice brought together key people from academia, NGOs, donor agencies and industry to address the challenge of missing or poor data, and develop innovative approaches to inform policies and investments in the livestock sector. The meeting was hosted by the International Livestock Research Institute (ILRI).

Around the world, hundreds of millions of poor people depend on livestock for nutritious food, income, and on-farm assistance. Low productivity and poor health of livestock in these regions results in low incomes for smallholder farmers. Governments and donors require relevant data in order to select and design the best livestock strategies for improving productivity and health.

The LD4D community is unique in its aim to help ‘data suppliers’ and ‘data users’ interact effectively, and ensure data supply and demand are met,’ said Andy Peters, director of the Supporting Evidence Based Interventions (SEBI) program which facilitates LD4D at the meeting.

The issues are particularly relevant to Vietnam and other Southeast Asia countries where the livestock farming has rapidly intensified to feed more people and to respond to the need for animal source foods, said Hung Nguyen, ILRI regional representative for East and Southeast Asia.

At the three-day meeting, delegates presented ongoing collaborations and projects including:

- Modelling the impacts of animal health investments led by the Bill & Melinda Gates Foundation;
- LiveGAPS – a project for estimating and closing livestock productivity yield gaps, led by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia;
- Livestock Fact Check, which investigates the data behind popular facts and figures in order to inform debates and discussions; and
- The Global Burden of Animal Diseases (GBADs), a new global initiative for estimating which animal diseases have the greatest economic impacts.

Central themes included how data could help investors measure and improve the impact of their initiatives; improving data standards and quality; and responsibly communicating livestock messages in a time of ‘alternative facts’.

The meeting identified ideas, concepts, and collaborations that would show great promise for improving data for better livestock decisions.



Welcome to the fourth edition of ILRI East and Southeast Asia newsletter!

We hope to share a newsletter with you every six months to give you, our donors, partners and colleagues timely updates on ILRI’s ongoing research activities, news and events in the region. I hope you will enjoy reading it and thank you for supporting ILRI East and Southeast Asia over the past years and in future.

Learn more about our work at www.asia.ilri.org. If you have any feedback please contact ilri-vietnam@cgiar.org.

Hung Nguyen-Viet
ILRI regional representative
for East and Southeast Asia

Institutional news

Senior Myanmar livestock official visits ILRI to discuss possible research partnerships

In late November 2018, Ye Tun Win, the head of the Livestock Breeding and Veterinary Department in Myanmar's Ministry of Agriculture, Livestock and Irrigation (MOALI), visited ILRI in Nairobi to discuss potential collaboration opportunities. The discussions focused on how the two organizations could tackle challenges in the livestock sector in Myanmar.



Ye Tun Win, director general, Livestock Breeding and Veterinary Department, the Republic of the Union on Myanmar visited ILRI's Kapiti Ranch (photo credit: ILRI).

Leaders of A4NH Flagship strengthen One Health collaboration with partners in Vietnam

Bernard Bett and Jeff Waage, leaders of the Improving Human Health flagship in the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) visited Vietnam. They met representatives from the National Institute of Hygiene and Epidemiology, the Department of Animal Health and international partners from 19-21 November 2018 to explore further opportunities for working together on zoonoses, antimicrobial resistance (AMR) and infectious diseases epidemiology.

NIHE–ILRI agreement to deepen cooperation in research for development in Vietnam

On 26 November 2018, the National Institute of Hygiene and Epidemiology (NIHE) of Vietnam and ILRI signed a memorandum of agreement that will pave the way for deepening their collaboration in research for development.



From left: Dang Duc Anh, director general of NIHE and Shirley Tarawali, assistant director general of ILRI (photo credit: ILRI).

ILRI delegation attends global event on ending hunger and malnutrition

A senior delegation from ILRI joined a global conference on Accelerating the End of Hunger and Malnutrition in Bangkok on 28-30 November 2018. The event provided a platform to accelerate the sharing of existing knowledge, approaches and tools that have led to success in many countries, so others can learn, adapt and accelerate their own work to reduce hunger and malnutrition in sustainable ways.

Antibiotic resistance, zoonotic diseases and food security in focus for SIGHT Award 2018

Johanna Lindahl, ILRI senior scientist in veterinary-epidemiology, was awarded the SIGHT Award 2018 and SEK 100,000 by the Swedish Institute for Global Health Transformation, SIGHT. The prize is awarded for excellent scientific contribution to global health.

Project events

Experts work to understand link between livestock farming and vector-borne diseases in Vietnam

On 5 July 2018, Vietnamese animal health and zoonoses experts met in Hanoi to explore ways of reducing mosquito-borne diseases in the urban areas of Hanoi, the capital of Vietnam. The meeting was part of the 'Metropolitan mosquitoes: understanding urban livestock keeping and vector-borne disease in growing tropical cities' project, which is researching the association between livestock keeping and mosquito-borne diseases.



A farmer spraying insecticide to control mosquitoes in a cattle farm (photo credit: ILRI).

Cambodia food safety project sets targets for 2019 and beyond

The Safe Food, Fair Food (SFFF) for Cambodia team and partners met on 5 September 2018 in Phnom Penh to review the successes and challenges of the project's efforts in addressing food safety in animal-source foods in the country.

Vietnamese partners further deliberate on setting up a national One Health research centre

In November 2018, Vietnamese One Health experts further deliberated on the modalities of establishing a One Health centre that will bring together human and animal health sector experts in the country to advance the translation of One Health research into policy.

Bioaerosol sampling to detect avian influenza virus in Hanoi's largest live poultry market

In October 2017, a team made up of researchers from the Duke University, the National Institute of Veterinary Research (NIVR) and ILRI used aerosol samplers to conduct surveillance for avian influenza at Ha Vi market, the largest live wholesale poultry market in Hanoi. This pilot study tested surveillance methods for screening large poultry markets for avian influenza virus. The results were recently published in the journal *Clinical Infectious Diseases*.



Researchers collect samples at Ha Vi market, Hanoi (photo credit: NIVR).

ILRI research on animal health and food safety featured at 15th symposium of veterinary epidemiology and economics

ILRI researchers hosted a session on 'Healthy foods in informal markets' at the 15th International Symposium of Veterinary Epidemiology and Economics (ISVEE 15) in Chiang Mai, Thailand, on 12-16 November 2018.



ILRI researchers at ISVEE 15 in Chiang mai, Thailand (photo credit: ILRI).

China science foundation and CGIAR review a livestock research project

The National Natural Science Foundation of China (NSFC)-CGIAR livestock research project meeting was held 6-7 December in Huazhong Agricultural University, Wuhan, China. The meeting provided an interdisciplinary forum at which investigators involved in livestock genetics, animal health, forage and feed research reviewed recent development and shared key research findings in the livestock-related collaborative projects jointly supported by NSFC and ILRI, the International Center for Agricultural Research in the Dry Areas (ICARDA) and the International Center for Tropical Agriculture (CIAT).

Exploring the use of 'nudges' to improve pork safety in Vietnam

The idea of promoting good 'nudges' (interventions or incentives) to change the behaviour and improve the practices of various actors along the pork value chain in Vietnam was discussed by partners of the 'Market-based approach to improving the safety of pork in Vietnam', or SafePORK project, at a Hanoi workshop on 27 November 2018 that was co-led by the Royal Veterinary College and ILRI.

Capacity development

ILRI supports capacity development in addressing emerging infectious diseases and risk assessment

Scientists from the Veterinary Public Health Centre for Asia Pacific in Chiang Mai University and ILRI collaborated in a range of capacity development activities in July 2018 that reflected their ongoing partnership in public health, food security and ecosystems health research.

CGIAR agriculture for nutrition and health program supports capacity development for food safety in Bangladesh

Scientists from ILRI and A4NH trained more than 30 stakeholders working on food safety in Bangladesh on different frameworks for food safety risk assessment that could improve the safety of food in the country.

Hands-on meat inspection training to improve pork safety in Vietnam, Laos and Cambodia

Fifty researchers from Vietnam, Laos and Cambodia benefited from meat inspection training workshops by the ILRI and German partners from the Federal Institute for Risk Assessment and the Free University of Berlin in November and December 2018.



Trainees visited pig farms in Hoa Binh Province, Vietnam (photo credit: ILRI).

Continued collaboration between ILRI and Southeast Asia One Health network

ILRI continues capacity development for the Southeast Asia One Health University Network (SEAOHUN) through its hosting of one DVM student (Phally Pha) from Royal University of Cambodia and a lecturer in health sciences from Naresuan University, Thailand (Narong Jaturas). Pha and Jaturas have conducted research on food safety and a Vietnam One-health case study, respectively.

Recent publications

Following are some recent publications of ILRI East and Southeast Asia. To see the full list, please visit our website at www.asia.ilri.org

- **Dang-Xuan, S., Nguyen-Viet, H.,** Pham-Duc, P., **Unger, F.,** N. Tran-Thi, **Grace, D.** and Makita, K. 2018. Risk factors associated with *Salmonella* spp. prevalence along smallholder pig value chains in Vietnam. *International Journal of Food Microbiology* 290: 105–115.
- **Nguyen-Viet, H., Grace, D.,** Pham-Duc, P., **Dang-Xuan, S.,** Luu-Quoc, T., **Unger, F.,** Vlieger, S. de, Pham-Thi, N., Duong-Van, N., Nguyen-Hung, L., Tran-Dinh, L. and Tran-Thi Tuyet, H., 2018. Research and training partnership to assist policy and capacity building in improving food safety in Vietnam. *Global Food Security* 19: 24–30.
- Bui-Nghia, V., Nguyen, T.T., **Nguyen-Viet, H.,** Bui, A.N., McCallion, K.A., Lee, H.S., Than, S.T., Coleman, K.K. and Gray, G.C. 2018. Bioaerosol sampling to detect avian influenza virus in Hanoi's largest live poultry market. *Clinical Infectious Diseases*.
- Thakur, M., Fernandes, M., Sathyakumar, S., Ramesh, S.K.S, Viji, K., **J.L. Han.,** D.D., Wu., and Y.P., Zhang. (2018) Understanding the cryptic introgression and mixed ancestry of Red Junglefowl in India. *PLoS ONE*, 13(10): e0204351. DOI: 10.1371/journal.pone.0204351.
- Z. J., Ma, X. T., Xia, S.M., Chen, X.C., Zhao, L.L., Zeng, Y.L., Xie, S.Y., Chao, J.T., Xu, Y.G., Sun, R. Z., Li, Z.X., Guanque, **J.L. Han,** and C.Z., Lei. (2018) Identification and diversity of Y-chromosome haplotypes in Qinghai yak populations. *Animal Genetics*, 49(6): DOI: 10.1111/age.12723.

Staff updates

We welcome the following staff:

- **Rortana Chea** from the Cambodian National Animal Health and Production Research Institute (NAHPRI) joined ILRI (Safe Food, Fair Food for Cambodia project) as a PhD student in September 2018. He will work with ILRI for three years.
- **Phally Pha** from the Royal University of Agriculture, Cambodia joined ILRI (Safe Food, Fair Food for Cambodia project) as a master student in September 2018 until end of January 2019.
- **Narong Jaturas** from Naresuan University, Thailand, joined ILRI Vietnam as a health researcher supported by the Southeast Asia One Health University Network (SEAOHUN). He completed his work in December 2018.

Upcoming events

- 27-29 March 2019: Regional symposium on research into smallholder pig production, health, and pork safety in Hanoi, Vietnam.
- 1-3 April: ILRI Vietnam staff retreat in Da Nang, Vietnam.

Contact us at ilri-vietnam@cgiar.org



The International Livestock Research Institute (ILRI) works to improve food and nutritional security and reduce poverty in developing countries through research for efficient, safe and sustainable use of livestock. Co-hosted by Kenya and Ethiopia, it has regional or country offices and projects in East, South and Southeast Asia as well as Central, East, Southern and West Africa. ilri.org



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Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996

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January 2019